

**The Brookings Institution and Italian Ministry of Foreign Affairs  
“Nuclear Energy and Non-Proliferation Roundtable”**

**DECEMBER 9, 2008**

**ASSISTANT SECRETARY FOR NUCLEAR ENERGY  
DENNIS R. SPURGEON**

Thank you Ambassador Castellaneta and thank you to the Brookings Institution and the Italian Ministry of Foreign Affairs for inviting me to take part in today's conference. If I were to summarize my comments to you in one sentence, it would be this: a global expansion of nuclear power is on the horizon and it is crucial that nations work together to ensure the expansion is done safely and securely.

Energy policies today are being largely driven by three considerations – economics, energy security, and environmental impacts. The increasing demand for energy around the world is overtaking the worldwide growth in the supply of fossil fuels – creating price volatility and uncertainty. Nations are realizing that depending on fossil fuels from external sources affects energy security and that increased CO<sub>2</sub> emissions could have devastating environmental impacts.

The Energy Policy Act of 2005 provided important tools to support nuclear expansion in the form of risk insurance, production tax credits and loan guarantees. DOE's nuclear power 2010 program has provided cost share support for reactor design standardization, demonstrating the new Combined Operating License process, and obtaining the first early site permits. As a result, the U.S. Nuclear Regulatory Commission has received 17 construction and operating license applications for 26 new reactors and is expecting another 6 applications for 8 reactors to be submitted by 2010.

The expansion of nuclear power has benefits beyond the energy supply and the environment; it will revitalize the U.S. nuclear industry, including heavy manufacturing and construction. Building a new nuclear power plant will create more than 1,400 jobs during construction, with a peak of 2,400. And, operating a nuclear power plant employs between 700 and 800 highly-skilled, highly-paid workers and creates hundreds of additional jobs in the surrounding communities. It is easy to project that a rebirth of nuclear power in the U.S. could create more than 1 million direct and indirect new jobs within 10 years.

Internationally, the trend is clearly to expand nuclear power and use renewable energy sources. And while renewables are important, nuclear power remains the only near-term source of emissions-free base-load electricity. As such, many countries are planning to expand their use of nuclear power and others are planning to use nuclear power for the first time. For example, last week the UK's Committee on Climate Change concluded that nuclear power must play key role in meeting the UK's emission goals and that

nuclear power is cost competitive with fossil fuels, even when the full life-cycle cost of a nuclear power plant is included.

The IAEA estimates that over 80 nations could have nuclear power by the middle of this century. With this potential global expansion, the question becomes – how to best ensure nuclear power is done safely and securely.

To support the safe and secure use of nuclear power, the U.S. initiated the Global Nuclear Energy Partnership or GNEP. GNEP is now a partnership of 25 nations (and still growing) joined in an effort to collectively address the challenges of expanding nuclear power. Our objective is not to encourage more nations to embark on nuclear power programs, but rather to encourage nations already considering nuclear power to fully understand the infrastructure requirements inherent in becoming a nuclear nation. Further, we seek to demonstrate that it is possible, and in fact preferable, for new nuclear nations to enjoy the benefits of nuclear power without the need for indigenous enrichment or reprocessing facilities.

GNEP has established two working groups to address key issues of the expansion of nuclear power.

The first is the Infrastructure Development Working Group (IDWG). The IDWG is focused on facilitating the development of the necessary infrastructure to support the safe and secure deployment of nuclear power, such as: nonproliferation and safeguards requirements, legal frameworks, regulatory requirements, and nuclear safety. In fact, the IDWG is meeting and holding two workshops this week in Vienna, Austria with 69 attendees representing 23 countries and 2 international organizations.

The second is the Reliable Nuclear Fuel Service working group that is focused on establishing international supply frameworks to enhance reliable, cost-effective fuel services, including spent fuel take-back and management, and reduce the risk of nuclear proliferation by creating a viable alternative to acquisition of sensitive fuel cycle technologies.

The global expansion of nuclear power must be done safely and securely. We recognize that an accident or serious incident *anywhere* in the world will likely have a serious negative affect on the nuclear progress *everywhere* in the world. The growth of GNEP is a testament to the shared international urgency to meet our challenges and ensure the safe, secure, and peaceful use of nuclear power.

That concludes my remarks, but if you will allow me a post script; today the expansion of nuclear power and renewable energy sources are facing a challenging environment with the global credit crisis making large capital investments difficult and oil prices at a nearly 4-year low. But, we cannot allow our plans for nuclear power and renewables to be affected by what are ultimately unsustainable fossil fuel alternatives. We must remain committed to a consistent energy policy that considers long-term energy-security needs and can withstand both marketplace variations and political transitions.